

Module 1

Pandemic Flu Basics

In this module, we will discuss:

- Seasonal flu
- What makes a flu “pandemic”
- What to expect in a flu pandemic
- Flu prevention

Seasonal Flu

Catching the influenza virus, also known as the flu, is not something we tend to worry about – or even think about. For most of us, the flu is just fever, aches, chills and a few days in bed. It comes with winter weather, and we’ve all seen it or had it. It’s a nuisance, but for healthy people, there’s not much to worry about. Right?



Not exactly. Seasonal flu still kills about 36,000 people in the United States each year. Most of us get better at home because we can fight the disease on our own, but older people, pregnant women, the very young and those who are already sick with other diseases can become very ill from seasonal flu and even die. That’s why it’s important to get the seasonal flu vaccine every year.

WHAT’S THE DIFFERENCE BETWEEN A COLD AND THE FLU?

Both are caused by viruses, but their symptoms are not the same. This chart is also provided as a resource at the end of this module.



Pandemic Influenza Awareness Program

This program is made possible by the New Jersey Office of Homeland Security and Preparedness and the New Jersey Department of Health and Senior Services.



Is it a cold or the flu?		
Symptoms	Cold	Flu
Fever	Rare	Yes, often high (102° to 104°), lasts 3 to 5 days
Headache	Mild	Yes, sudden and can be severe
Aches/pains	Mild	Usual, often severe
Fatigue/weakness	Mild	Yes, sudden and can last 2 to 3 weeks
Extreme exhaustion	Never	Yes
Stuffy nose	Common	Sometimes
Sneezing	Common	Sometimes
Sore throat	Common	Sometimes
Chest discomfort/cough	Mild hacking cough	Common, can be severe



PHOTO COURTESY LIBRARY OF CONGRESS

Pandemic flu:

- Is more dangerous than seasonal flu
- Can cause millions of deaths
- Can put millions out of work

PANDEMIC FLU IS ANOTHER MATTER

Pandemic flu can be much worse – far more dangerous than the seasonal flu we all know. A flu pandemic could kill millions of people in a few months and put millions more out of work. A flu pandemic can rip apart family life and community life for weeks, and it can kill otherwise perfectly healthy and strong people.



PHOTO COURTESY OAKLAND PUBLIC LIBRARY

What Makes a Flu “Pandemic?”

The term pandemic comes from a Greek word, meaning “all of the people.” A flu pandemic happens when a disease spreads quickly across many communities and around the world.

Specifically, three things need to happen for a flu pandemic to start:

- First, it takes a new and unusual type of flu virus. Flu viruses are always changing. That’s why we need the seasonal flu shot every year to match the latest viruses. Our immune systems can handle most of those viral changes, but every now and then the virus makes a big change that our bodies cannot handle.
- Second, the new virus must be able to make people really sick. Sick enough to keep us in bed for several days – enough to weaken our bodies, so that other diseases, like pneumonia, can invade. The 1918 virus was so strong that it killed millions of otherwise perfectly healthy young men and women. Soldiers in top shape had some of the highest death rates in the country.
- Third, the new flu virus must be able to spread easily between people. When a sick person coughs or sneezes, droplets that contain the flu virus fall up to six feet away. Everything the virus touches becomes contaminated. By spreading from person to person, a virus can move dangerously fast. Through airline passengers, for example, a virus could spread from one city to five continents in hours.



PHOTO COURTESY OFFICE OF THE PUBLIC HEALTH SERVICE HISTORIAN

What makes a flu “pandemic?”

- New and unusual type of flu virus that our bodies cannot handle
- Makes people really sick
- Easily spreads between people



Pandemic flu may travel the world two or three times, in waves of six to eight weeks in each community.

HOW LONG DOES A FLU PANDEMIC LAST?

During a pandemic, the flu virus may travel the world two or three times in 18 months, in waves that last two to three months in each community. In the United States alone, millions of people could get sick, many at the same time.

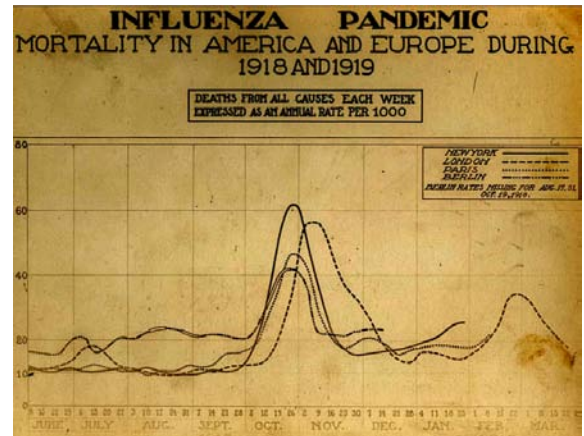


PHOTO COURTESY NATIONAL MUSEUM OF HEALTH AND MEDICINE

WHAT ABOUT A VACCINE?

At the beginning of a pandemic, we won't have a vaccine to protect us like we do with the seasonal flu. With current technology, it takes six to nine months to produce a flu vaccine. By then, millions of people could be sick. Even when the new vaccine becomes available, we won't be able to make it fast enough to protect everyone at the same time.



PHOTO COURTESY CDC

At the beginning of a pandemic, we won't have a vaccine to protect us like we do with the seasonal flu.



PHOTO COURTESY CDC



QUIZ 1

The seasonal flu vaccine protects you from getting pandemic flu.

☐ True ☐ False

Answers are at the end of this module.

What to Expect in a Flu Pandemic

Unlike the seasonal flu, which arrives with cold weather every year, flu pandemics don't happen that often. And no one can predict when the next flu pandemic will arrive or how severe it will be. In the last century, for example, there were three: in 1918, 1957 and 1968.

MYTH: An influenza pandemic is overdue.

FACT: There is no biological ticking clock for pandemics. We have improved tools to recognize trends in viruses and infection in animals and humans, but there is no way to predict when the next pandemic will occur.

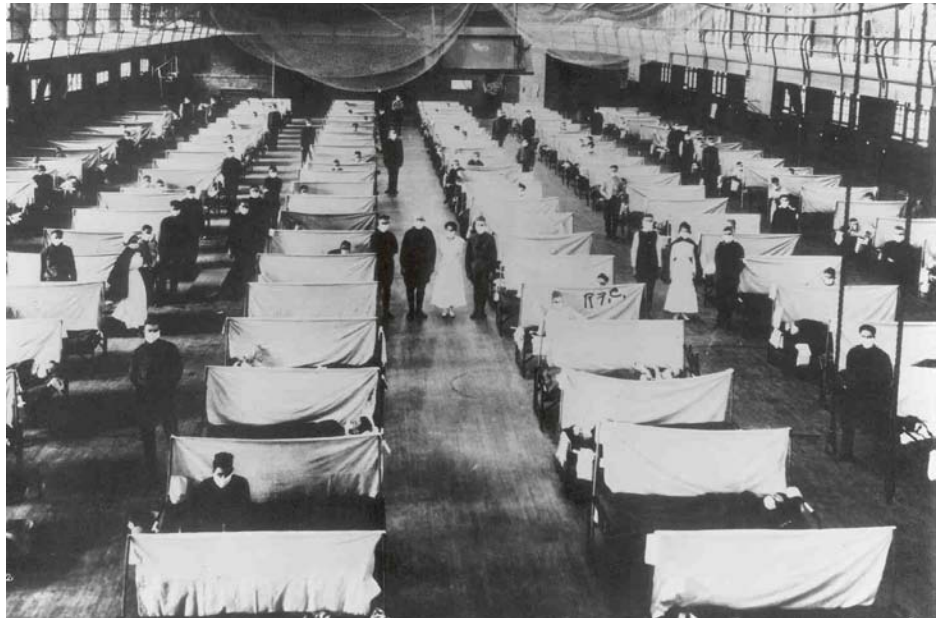


PHOTO COURTESY OFFICE OF THE PUBLIC HEALTH SERVICE HISTORIAN



"The World at Six"

CBC Radio-Canada

December 16, 1968

Hong Kong Flu Report

With a report, here's Al Robbins in New York City.

In the east, the outbreak of flu is hit with particular force in the cities of New York, Boston and Washington D.C. Most colleges in the Boston area report that infirmaries are filled to capacity and absenteeism among federal employees in Washington has been unusually high.

Postmaster General Marvin Watson warns that the incidence of flu among postal workers may delay delivery of Christmas mail. Among eastern states, New Jersey, Connecticut and Pennsylvania have been hard hit and the absence of vaccine is complicating the problem...

COURTESY CBC RADIO-CANADA



More than 50 million people could get sick – 2.5 million in New Jersey alone.



Many businesses, services, schools and public spaces could close.

Here's an idea of what could happen:

- More than 50 million people could get sick in less than a year. In New Jersey alone, 2.5 million people could catch the flu. That's almost one out of every three people in the state – enough to fill Giants Stadium 31 times.
- There could be crippling shortages of hospital beds, doctors, nurses, medicine and even caskets. In 1918, hospitals hired armed guards to protect doctors and nurses from people trying to force their way in.
- Schools and day care centers may close for weeks at a time. We're used to schools closing for a few days because of a snowstorm or a hurricane. But in a pandemic, parents may need to find child care for up to two months during each wave.
- Half of all workers could be sick, at home caring for loved ones, or staying home to avoid getting sick. The lack of staff could force thousands of businesses to close, putting millions of people out of work. Unemployment could reach levels we have not seen since the Great Depression.
- Services we count on may not be available. Up to half of all police, fire fighters, ambulance drivers, utility workers, even grave diggers may be unable or unwilling to work as scheduled. Food may not be delivered. ATM machines may not get restocked with money.
- The government could use emergency laws to prevent people from gathering at places like restaurants, houses of worship or movie theaters. The government could also limit travel to reduce the spread of the flu.

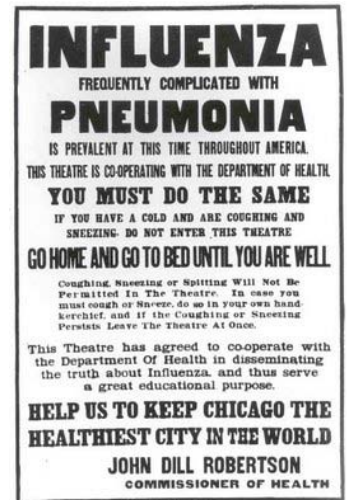


IMAGE COURTESY OFFICE OF THE PUBLIC HEALTH SERVICE HISTORIAN



QUIZ 2

During a flu pandemic, what percent of people might stay home from work?

- ☐ A: 5% ☐ B: 15% ☐ C: 30% ☐ D: 50%

Answers are at the end of this module.

Flu Prevention



There are three things you can do on your own, to slow the spread of the flu, whether or not a vaccine is available:

1. Become a better handwasher
2. Cover coughs and sneezes
3. Stay away from people who are sick and stay home when you are sick

1. BECOME A BETTER HANDWASHER

The simple act of “washing up” may save your life or save someone you love. Good handwashing with warm, soapy water can rinse flu viruses down the drain. And when a flu pandemic strikes, good handwashing is the one thing everyone can do to help prevent illness.

But there's bad news about handwashing. If we're graded on how we normally wash hands, many people would fail. Way too many people skip it all together: Studies show that 12% of women and 34% of men don't wash their hands regularly – even after going to the bathroom. Most people also wash too quickly. In Module 3, we'll go into detail about how to wash your hands the right way.

Because a typical flu virus can live on hard surfaces for up to 2 days, handwashing should be done throughout the day.

When should you wash your hands?

- When they look dirty
- Before preparing or eating food
- Before and after caring for someone who is sick
- Before and after treating any wound
- After blowing your nose, coughing or sneezing
- After using the toilet
- After changing diapers or assisting anyone who has gone to the bathroom
- After handling garbage
- After touching an animal or any animal waste
- After touching any surface or object that is frequently touched by other people



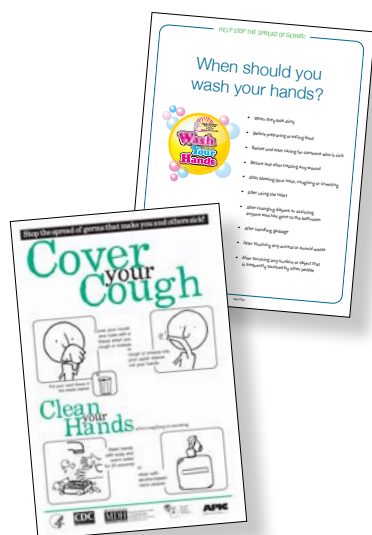
The simple act of “washing up” may save your life or save someone you love. Good handwashing with warm, soapy water can rinse flu viruses down the drain.



When a sick person coughs or sneezes, droplets that contain the flu virus fall up to six feet away. Everything the virus touches becomes contaminated.

PHOTO COURTESY DEPARTMENT OF MEDICAL MICROBIOLOGY, EDINBURGH UNIVERSITY

Use the posters at the end of this module to teach others how to help stop the spread of germs.



In case you can't get to soap and water, use an alcohol-based hand sanitizer. Make sure it has at least 60% alcohol.

Between handwashings, prevent the spread of germs by keeping hands away from your eyes, nose and mouth.

Finally, you can teach and model this behavior for others – especially children. By becoming a better handwasher you may find that you have to deal with fewer colds and other illnesses.



QUIZ 3

When should you wash your hands?

- ☐ A: Before and after caring for someone who is sick
- ☐ B: After blowing your nose, coughing or sneezing
- ☐ C: After touching any surface or object that is frequently touched by others
- ☐ D: All of the above

Answers are at the end of this module.

2. COVER COUGHS AND SNEEZES

Always cover your nose and mouth when you cough or sneeze – but don't use your hands.



That will spread the virus to other people and the things you touch. If you have a tissue, cough or sneeze into it. Put the tissue in a wastebasket right away and wash your hands. Leaving tissues lying around increases the chances of someone else catching the flu. When emptying the wastebasket, avoid touching the tissues and remember to wash your hands afterward.

If you don't have a tissue ready, cough or sneeze into your sleeve by bending your elbow and burying your nose and mouth in the inner elbow of your shirt sleeve. If you do use your hands, wash them right away.



IMAGE COURTESY OTORHINOLOUNSBURGLOGY PRODUCTIONS

3. STAY AWAY



Along with good handwashing and covering coughs and sneezes, you can protect yourself by staying away from people who are sick and staying home from work or school when you're sick.

During a flu pandemic – and even during flu season – you might want to keep away from crowded areas and stay away from everyone as the flu can be contagious for up to 24 hours before symptoms appear. Generally, the virus can continue to spread for up to 5 days after you feel sick. In children, those 5 days actually may be 7 days or more. That's why sick people should stay home. That's also why you may have to take special steps to protect yourself when caring for loved ones who are sick.

Preparing for Pandemic Flu

A pandemic moves fast and the only time to prepare is before it actually begins. No one can predict when, where or how hard it will strike. But there are steps you can and should start taking now to protect yourself and your family.

In Module 2, we'll explore how you can prepare.



Let's Review!

- What makes a flu “pandemic?”
 - New and unusual type of flu virus that our bodies cannot handle
 - Makes people really sick
 - Easily spreads between people
- A vaccine is likely to be unavailable at the beginning of a pandemic. With current technology, it takes six to nine months to produce a flu vaccine.
- Many businesses, services, schools and public spaces could close.
- What YOU can do
 - Become a better handwasher.
 - Use a tissue to cover your coughs and sneezes and then wash your hands.
 - If soap and water are not available, cover your cough or sneeze by burying your nose and mouth in the inner elbow of your shirt sleeve.
 - Stay away from people who are sick.
 - Stay home when you are sick.

MODULE 1 ANSWERS

QUIZ 1: FALSE

Since a flu pandemic is caused by a new kind of flu virus, you will need a different vaccine. However, an annual flu vaccine is the best way to prevent the seasonal flu.

QUIZ 2: D – 50 PERCENT

Up to 5 out of 10 people could be absent from work at any given time during a pandemic.

QUIZ 3: D – ALL OF THE ABOVE.

Because a typical flu virus can live on hard surfaces for up to 2 days, handwashing should be done throughout the day.

RESOURCES FOR MODULE 1

Know where to get reliable information. If you are at a computer and connected to the Internet, bookmark these two websites now. Otherwise, write them down on the inside cover of your *Pan Flu Resources* folder:

- www.pandemicflu.gov
- www.njflupandemic.gov

That's where you'll find the most current, accurate information.

Other resources used in this module include:

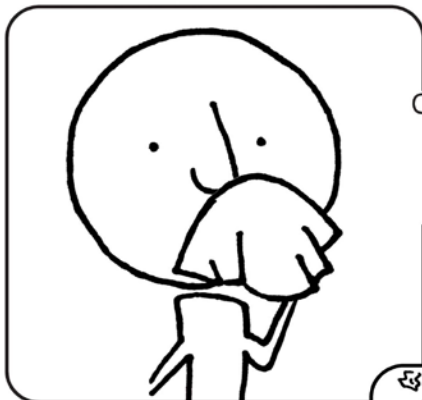
- *Is it a Cold or the Flu?*, from the New Jersey Department of Health and Senior Services www.state.nj.us/health/flu/fluorcold.shtml
- *Cover Your Cough* (shown at the end of this module), from the U.S. Centers for Disease Control and Prevention www.cdc.gov/flu/protect/covercough.htm
- *When Should You Wash Your Hands* (shown at the end of this module), from the New Jersey Department of Health and Senior Services www.nj.gov/health/flu/documents/when_to_wash_hands.pdf

If you are worried about the flu and want help dealing with your feelings, go to www.disastermentalhealthnj.com or call 1-877-294-HELP (4357) or TTY 1-877-294-4356.

See you in Module 2!

Stop the spread of germs that make you and others sick!

Cover your Cough



Cover your mouth
and nose with a
tissue when you
cough or sneeze
or

cough or sneeze into
your upper sleeve,
not your hands.

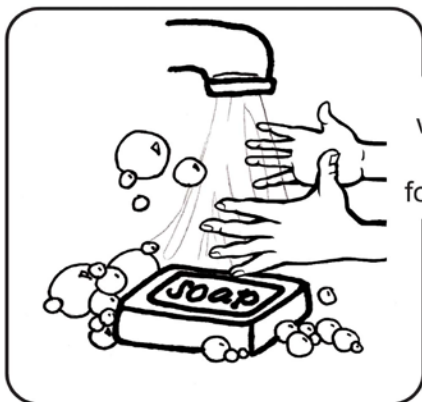


Put your used tissue in
the waste basket.



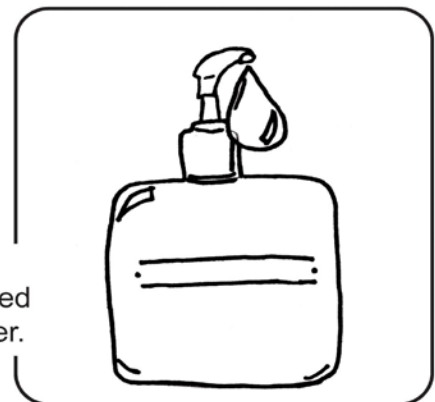
Clean your Hands

after coughing or sneezing.



Wash hands
with soap and
warm water
for 20 seconds

or
clean with
alcohol-based
hand cleaner.



Minnesota Department of Health
717 SE Delaware Street
Minneapolis, MN 55414
612-676-5414 or 1-877-676-5414
www.health.state.mn.us



Minnesota
Antibiotic
Resistance
Collaborative



When should you wash your hands?



- When they look dirty
- Before preparing or eating food
- Before and after caring for someone who is sick
- Before and after treating any wound
- After blowing your nose, coughing or sneezing
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